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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,612

05/01/2006

Timothy George Bissett

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EXAMINER

CAHN, DANIEL P

ART UNIT

PAPER NUMBER

4128

MAIL DATE

DELIVERY MODE

04/14/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,612	Applicant(s) BISSETT, TIMOTHY GEORGE	
	Examiner DANIEL P. CAHN	Art Unit 4128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/01/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the spring (in claim 13) and the plastically deformable element (in claim 14) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 11 is objected to because of the following informalities: There is no second energy absorbing means claimed within this dependent claim set, yet the claim refers to a “third energy absorbing means”. Examiner is assuming the third energy absorbing means is a second energy absorbing means.

Claims 12 and 14 are objected to because of the following informalities: the claim states “at least one of the energy absorbers”, yet there is only one energy absorber referred to which makes these awkwardly worded sentences.

Appropriate correction is required.¹

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8 and 10-14 are rejected under 35 U.S.C. 102(b) as being unpatentable by Matoba (US 7117975).

1. Regarding claim 1, Matoba teaches **a fall arrest system comprising an upper anchor point** (2, 15, W, 1, 3, G and all other elements related to these parts that aid in dampening the system) **and a lower anchor point** (10, 11, 23, 24, 12, and 13) **and a vertical cable** or chain (7) **mounted between the anchor points, and further comprising a first energy absorbing means** or spring (15) **associated with the upper anchor point.**

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2. Regarding claim 2, **the first energy absorbing means is adapted to control the load applied to the upper anchor point** (refer to Fig. 1). The spring controls or restrains the overall load applied to element 10.
3. Regarding claim 3, **a fall arrest device (F) is mounted on the vertical cable and a second energy absorbing means associated with the fall arrest device, in which the second energy absorbing means (13) is adapted to control the load experienced by a user and the first energy absorber (15) is adapted to control the load applied to the upper anchor point.** The spring controls or restrains the overall load applied to element 10.
4. Regarding claim 4, **the lower anchor point is arranged to provide an additional extension of the system** (this occurs when the spring (13) is activated).
5. Regarding claim 5, **the lower anchor point includes a slip element** or sprocket (11).
6. Regarding claim 6, **the lower anchor point is deformable** (the spring is deformable).
7. Regarding claim 7, **the upper and lower anchor points are at the upper and lower ends of the cable** (refer to Fig. 1).
8. Regarding claim 8, **a fall arrest device (F) arranged for movement along the cable.** The fall arrest device or hook (F) moves along with the cable as the cable is moved by the weight of the escaping human as discussed in the first paragraph of column 7.

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The operation of the present invention composed as above will be described next. When the escape hook F is attached to the suspension chain 7 of the descending device A1 and an escaping person is suspended therefrom, the weight of the escaping person is applied to the suspension chain 7 and generates the rotational torque of the sprocket G. This rotational torque is transmitted to the sprocket 56 mounted on the brake converter shaft of the brake converter S via the power transmitting device A2, thereby rotating the brake converter shaft 59, actuating the rotational governor 58, operating the pump impeller through the collar lever 25b and the control link 25, and generating braking force by narrowing the distance between the turbine runner and the pump impeller.

9. Regarding claim 10, **comprising one or more cable guides (G).**
10. Regarding claim 11, **the additional extension of the system is provided by a third energy absorbing means or spring (13) associated with the lower anchor point.**
11. Regarding claim 12, **at least one of the energy absorbers is resilient**, as springs (13 and 15) are inherently resilient.
12. Regarding claim 13, in which the **resilient energy absorber is a spring (15).**
13. Regarding claim 14, **at least one of the energy absorbers includes a plastically deformable element (13).** The examiner interprets the phrase “plastically deformable element” to mean an element that is able to be plastically deformed, therefore, a spring is able to be plastically deformed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matoba, further in view of Lantz (US 5113981).

Matoba teaches all of the elements of the instant invention as discussed in detail above except providing **the fall arrest device** being comprised of **an energy absorbing means**. Attention is directed to Lantz which teaches a similar safety line fall device having an energy absorption means (refer to Fig. 7) designed to be attached to a fall arrest device in order to dampen the shock of the fall arrest device being actuated (refer to abstract). It would have been obvious to one of ordinary skill in the art to have provided the hook or fall arrest device of Matoba with the energy absorbing means as taught by Lantz in order to reduce the shock incurred by a falling occupant in a fall arrest device to provide the user with a safer landing.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL CAHN whose telephone number is (571)270-5616. The examiner can normally be reached on Monday through Friday 7:30 am to 5 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoa Huynh can be reached on (571)272-4888. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

D. P. C.
Examiner, Art Unit 4128

/Khoa D. Huynh/
Supervisory Patent Examiner, Art Unit 4128